

Forsyth, F.R.S., has consented to deliver an address on 'Universities: their Aims, Duties, and Ideals.' Invitations have been issued to many members of the British Association, as well as to others interested in educational work.

#### THE CENTENARY OF HEIDELBERG UNIVERSITY.

ON August 5-8 the University of Heidelberg celebrated the centenary of its re-establishment. The university, one of the oldest universities of the modern world, was originally founded in 1386 by the Palsgrave Ruprecht I. of the Palatinate. At that time Heidelberg was the seat of the princely residence and capital of this wealthy State of the middle ages, and the young university did good work from the point of view of those times. The "German Medici," Otto Heinrich (1556), delivered the university from the chains of scholastic pedantry and inspired in her the ideas of the Renaissance and of the Reformation. The thirty years' war had a disastrous effect on this town and its university, as, indeed, it had on all Germany; nevertheless, the Elector, Karl Ludwig (1650), again gave it a short period of prosperity. But with the year 1685 commenced for the Palatinate and the university a long period of sorrow and loss.

Soon the positions held by broad-minded inquirers and teachers were occupied by imperfectly educated members of Catholic Orders, and the university sank to a mere confessional school. Scientific research degenerated into the school-divinity of the middle ages, appointments were given by those in control to their relatives, and very strict tests in matters of faith were imposed.

The result was that, during the eighteenth century, scarcely any work of scientific value was done by the university, and the number of students sank to a minimum. The condition of affairs was made still worse by the loss of the income hitherto derived from the possessions on the other side of the Rhine, which were then in the hands of the French.

Though the Bavarian Prince, into whose hands Heidelberg had fallen in 1799, commenced to break the dominion of the monks, and though he sought to procure new incomes for the impoverished university, her renovation was really the work of the Badish Prince, Carl Friedrich.

By the division of Germany in 1803, Heidelberg came into the possession of the Elector, Carl Friedrich, who later became the Grand Duke of Baden. Without delay, he commenced to re-establish the Heidelberg University, to give to her a broad constitution resting on high ideals, and last, but not least, to procure the necessary money.

He endowed the university with an annual sum of 50,000 florins, which had to be raised by the State. He reserved to himself the office of "Rector" of the university, a charge which since that time has rested in the hands of the Grand Dukes. The essential principle of the reorganisation is to be found in the rule that "the professors' chairs shall be filled by the most worthy competitors, without any consideration of their religion."

The names of the first professors of that time are still well known. I only recall the names of the theologians Daub, De Wette, Paulus, the jurists Thibault and Zachariae, the physician Naegele, and the philosophers T. H. Voss, Creuzer, and Bökh. It is the centenary of this reorganisation that the university has just now celebrated.

Indeed, what these beginnings promised, the nineteenth century has seen fulfilled, and the university has taken her place among the foremost of the world. Excellent scientific laboratories, observatories, and

hospitals have been built, a monumental library-building is in the process of construction, and the first modest annual endowment of 50,000 florins has grown to one of 800,000 marks, to which has been added a regular special grant, amounting in the budget of 1902-03 to almost exactly a million of marks, so that at the present time about 65,000 pounds sterling are expended annually upon the university.

If one remembers that Baden has about two millions of inhabitants, and that it possesses not only one, but three universities (Heidelberg, Freiburg, and the Karlsruhe Polytechnicum), it must be confessed that a great work has been accomplished. The number of professors and *doctents* of the Heidelberg University is now 151, that of students 1884.

The work of the university during the nineteenth century has received the acknowledgment of educated men all over the world. The development of the history of Christianity is connected with the Heidelberg names, Hitzig, Ulmann, Rothe, Schenkel, and Holsten; lawyers and political economists appreciate fully the influence of Vangerow, Windscheid, Bluntschli, Mittermaier, Renaud, and Knies; physicians will remember the names of Chelius, Pfeuffer, Arnold, and Gegenbaur. The names of the philosophers Hegel and Zeller are known far and wide. Well known, too, are the philologists Kochly, Ribbeck, Wachsmuth, Zaugemeister, and Bartsch, and the historians Schlosser, Häusser, Gervinus, and Treitschke. The mathematicians Hesse and Fuchs, and the leaders in natural science, Hofmeister, Kekulé, Kopp, and above all Bunsen, Kirchhoff and Helmholtz, have spread the glory of Heidelberg over the world.

The greatest credit for the success of the Heidelberg University in the past century must be attributed to the Grand Duke Friedrich, now seventy-six years old, who—during the fifty-one years in which he has been Rector—has made the university what she is to-day.

In the evening of August 5 the students formed a torch-light procession in honour of the Grand Duke. The next morning, after a festival divine service, the Actus was held in the Aula of the university, where the Grand Duke, the Minister, the deputations of other universities and corporations, and the acting Prorector of the university (Prof. Czerny) delivered addresses. After a banquet a reception was given by the city in the poetical ruins of the celebrated Heidelberg Castle.

On August 7 the historian of the university (Prof. Marks) gave a historical address, concerning the development of the scientific life of the university during the past century. In the evening the students held their great "Commerz."

The announcement of the *honoris causa doctores* took place next morning. In the branch of medicine the following men of science were elected:—M. T. H. Dunant, Geneva; Prof. Sv. Arrhenius, Stockholm; Sir W. Ramsay, London; Prof. P. Lenard, Kiel; G. Schweinfurth, Riga; G. Moynier, Geneva.

In the branch of natural science the following were elected:—Mathematics, M. G. Darboux, Paris; physics, Dr. R. T. Glazebrook, London; astrophysics, Sir William Huggins, London; chemistry, Prof. S. Cannizzaro, Rome; mineralogy, Prof. F. Fouqué, Paris; astronomy, Prof. E. C. Pickering, Cambridge, U.S.A.; zoology, Prof. E. Maupas, Algiers; botany, A. Cogniaux, Nivelles.

In the evening of August 8 a reception was given by the Grand Duke and the Grand Duchess at their castle in Schwetzingen. Sunday, August 9, was devoted to excursions in the neighbourhood, and at night an illumination of the castle, and a great display of fireworks on the Neckar, brought the festivities to a close.

The present generation has expressed by these splendid meetings that it appreciates highly the benefit

resulting from the reorganisation of the university by Carl Friedrich, and the work done by the scientific men of past generations, and has indicated how it hopes that, in the century just begun, the development will not cease but continue, that new successes will be achieved by the more and more unrestrained unfolding of all intellectual forces, and that these successes may help to brighten the minds of the people, and to connect them more and more by the bridges of science, notwithstanding political boundaries. M. W.

#### BRITISH MEDICAL ASSOCIATION SWANSEA MEETING.

THE seventy-first annual meeting of the British Medical Association was concluded at Swansea on July 31. It will be remembered that last year the meeting was held at Manchester, and although as was *a priori* to be expected the numbers at Swansea fell short of those at Manchester, yet nevertheless the meeting will always live in the memory of those who attended it as an unqualified success.

The president this year was Dr. Griffiths, of Swansea, and in an excellent opening address he touched upon many points of interest and importance both to the profession and to the public. Not the least interesting of these to the readers of NATURE was the president's reference to the much discussed question of hospitals for paying patients. Sooner or later the very serious attention of the profession, and most probably also of the Government, will have to be directed to this question. An increasing number of patients requiring skilled medical or surgical treatment, such as they cannot obtain at their own homes, is occurring among a class the financial position of which, while being such as to render them the unethical recipients of charity, yet nevertheless is not adequate to meet the charges of private nursing homes. From the point of view of the economist, it seems truly absurd that this class cannot be catered for.

Another point of interest in the president's address was the repetition of the great want of complete re-modelling of the Public Health Government Department. The need for something in this country corresponding to the German Gesundheitsamt has from time to time been emphasised in these columns. Numerous departmental committees appointed by various departments, the minutes of reference to which, however, have all borne directly upon the public health, have embodied in their reports a specific recommendation to this effect. Stress has also been laid upon the inadequacy of the present Governmental machinery for dealing with the important questions which modern technical industry and knowledge, using these terms in the widest sense, are apparently intermittently, but actually constantly, forcing into public hygiene. The policy adopted by the different departments of State concerned has heretofore been one of empirical opportunism. When a question has been sufficiently acute a Departmental Committee has been appointed and a report of this kind issued, often after considerable lapse of time; with the exception of notices at the time of its appearance in the Press, this report and its recommendations are often never heard of again. This policy, although it may have the effect of saving the salaries of permanent officials, cannot in the present state of the question continue long, and we are pleased to see that it was brought prominently before the greatest professional organisation which exists, viz. the British Medical Association.

The address in medicine was delivered by Dr. F. T. Roberts, the subject chosen being infective and infectious diseases. The lecturer dealt chiefly with the

influence which new scientific method has exercised upon the diagnosis and treatment of disease. The scientific methods considered were essentially those which have been introduced as a result of increased knowledge of pathology, comprising under this term chemical pathology and bacteriology. These sciences, true to their name, have been without doubt most ancillary to medicine, but their very helpfulness may in itself be a source of danger in so far as concerns the progress of our knowledge of the treatment and diagnosis of disease. These new methods have a tendency, according to the lecturer, to be studied and pursued at the expense of the purely clinical ones. Students, in short, are apt to spend too much time in the laboratory and too little in the wards. An interesting part of the address was devoted to the question of the use of alcohol as a therapeutic agent; in this connection we heartily recommend the remarks of the lecturer to all interested in this question. There can be no doubt that under certain conditions therapeutics possesses no more valuable agent; most clinicians, as the result of their experience, are enabled to maintain that numerous lives have been saved by the skilful administration of alcohol; but, on the other hand, it is equally true that the seeds of future intemperance have not infrequently been sown by the indiscriminate and indefinite instructions, or rather want of instructions, which often accompany the ordering of alcohol by the practitioner of medicine. Too much care cannot be exercised in the prescribing of a remedy so potent both for good and evil.

The address in surgery was delivered by Prof. Mayo Robson, who took for his subject the evolution of abdominal surgery during the last third of a century. The address practically confined itself to the enormous development which has taken place in this branch of the healing art during the above time. In conclusion, the lecturer remarked that the future progress of surgery will probably be intimately bound up with the work of the physician, the pathologist, and the bacteriologist, and the time will come when preventive measures will save much operative work.

Much good work was done at the meetings in the different sections, though apparently no papers of very striking original interest were communicated. The social arrangements left little to be desired, the profession at Swansea and the neighbourhood extending a very hearty welcome to the visitors. Many, no doubt, made the Association meeting at Swansea the starting point of their holidays, and we have little doubt that the mental food ingested there will in many cases be assimilated on the charming holiday grounds of Wales. F. W. T.

#### VENTILATION OF FACTORIES AND WORKSHOPS.<sup>1</sup>

ABOUT three years ago, Lord Ridley, when Secretary of State for the Home Department, appointed a committee consisting of Dr. J. S. Haldane, F.R.S., and Mr. E. H. Osborn, engineering adviser to the Chief Inspector of Factories, to inquire into and report upon the means of ventilation in factories and workshops, with especial reference to the use of fans and the use and construction of respirators for the protection of workpeople exposed to dust or dangerous fumes.

In the report before us the committee deals with a portion only of the question upon which it was directed to make inquiry. It is for the present mainly concerned in the attempt to strengthen the

<sup>1</sup> "First Report of the Departmental Committee appointed to inquire into the Ventilation of Factories and Workshops; with Appendices." (London: Eyre and Spottiswoode, 1903.)